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1600

RAW SEQUENCE LISTING

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:03

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

4 <110> APPLICANT: SHAO, Wei et al.
 6 <120> TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
 7 NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,
 8 AND USES THEREOF
 10 <130> FILE REFERENCE: CL001163
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/804,472A
 C--> 12 <141> CURRENT FILING DATE: 2001-03-13

12 <160> NUMBER OF SEQ ID NOS: 72
 14 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 3625
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Homo sapiens
 21 <400> SEQUENCE: 1

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24 tctttttctt tttcttcttc tatttaaaaa ttctaatacat ggatgcttct tccgaccctt 180
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26 ctcatatac aatgacaaat ggaggcagca ttaacagttc tacacattta ctggatcttt 300
27 tggatgaacc aattccaggt gttggtacat atgatgattt ccatactatt gattgggtgc 360
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30 caggattggc atcaggggca ctggccggat taatagacat tgctgccgat tggatgactg 540
31 acctaaagga gggcatttgc cttagtgcgt tgtggtacaa ccacgaacag tgctgttggg 600
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Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

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53 ttattgtttt tgagcttact ggaggcttgg aatatattgt tccccttatg gctgcagtca 1920
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68 gtctaacaga aagcagcgta tcaactccta ttgttctgca ctggatgcat tcagctgagg 2820
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85 <211> LENGTH: 791

86 <212> TYPE: PRT

87 <213> ORGANISM: Homo sapiens

89 <400> SEQUENCE: 2

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92 Asn Ile Pro Leu Arg Glu Leu His Lys Arg Gly Thr His Tyr Thr Met
93 20 25 30
94 Thr Asn Gly Gly Ser Ile Asn Ser Thr His Leu Leu Asp Leu Leu
95 35 40 45
96 Asp Glu Pro Ile Pro Gly Val Gly Thr Tyr Asp Asp Phe His Thr Ile
97 50 55 60
98 Asp Trp Val Arg Glu Lys Cys Lys Asp Arg Glu Arg His Arg Arg Ile
99 65 70 75 80
100 Asn Ser Lys Lys Lys Glu Ser Ala Trp Glu Met Thr Lys Ser Leu Tyr
101 85 90 95

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TIME: 14:22:03

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Output Set: N:\CRF4\11062003\I804472A.raw

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103      100      105      110
104 Gly Ala Leu Ala Gly Leu Ile Asp Ile Ala Ala Asp Trp Met Thr Asp
105      115      120      125
106 Leu Lys Glu Gly Ile Cys Leu Ser Ala Leu Trp Tyr Asn His Glu Gln
107      130      135      140
108 Cys Cys Trp Gly Ser Asn Glu Thr Thr Phe Glu Glu Arg Asp Lys Cys
109 145      150      155      160
110 Pro Gln Trp Lys Thr Trp Ala Glu Leu Ile Ile Gly Gln Ala Glu Gly
111      165      170      175
112 Pro Gly Ser Tyr Ile Met Asn Tyr Ile Met Tyr Ile Phe Trp Ala Leu
113      180      185      190
114 Ser Phe Ala Phe Leu Ala Val Ser Leu Val Lys Val Phe Ala Pro Tyr
115      195      200      205
116 Ala Cys Gly Ser Gly Ile Pro Glu Ile Lys Thr Ile Leu Ser Gly Phe
117      210      215      220
118 Ile Ile Arg Gly Tyr Leu Gly Lys Trp Thr Leu Met Ile Lys Thr Ile
119 225      230      235      240
120 Thr Leu Val Leu Ala Val Ala Ser Gly Leu Ser Leu Gly Lys Glu Gly
121      245      250      255
122 Pro Leu Val His Val Ala Cys Cys Cys Gly Asn Ile Phe Ser Tyr Leu
123      260      265      270
124 Phe Pro Lys Tyr Ser Thr Asn Glu Ala Lys Lys Arg Glu Val Leu Ser
125      275      280      285
126 Ala Ala Ser Ala Ala Gly Val Ser Val Ala Phe Gly Ala Pro Ile Gly
127      290      295      300
128 Gly Val Leu Phe Ser Leu Glu Glu Val Ser Tyr Tyr Phe Pro Leu Lys
129 305      310      315      320
130 Thr Leu Trp Arg Ser Phe Phe Ala Ala Leu Val Ala Ala Phe Val Leu
131      325      330      335
132 Arg Ser Ile Asn Pro Phe Gly Asn Ser Arg Leu Val Leu Phe Tyr Val
133      340      345      350
134 Glu Tyr His Thr Pro Trp Tyr Leu Phe Glu Leu Phe Pro Phe Ile Leu
135      355      360      365
136 Leu Gly Val Phe Gly Gly Leu Trp Gly Ala Phe Phe Ile Arg Ala Asn
137      370      375      380
138 Ile Ala Trp Cys Arg Arg Arg Lys Ser Thr Lys Phe Gly Lys Tyr Pro
139 385      390      395      400
140 Val Leu Glu Val Ile Ile Val Ala Ala Ile Thr Ala Val Ile Ala Phe
141      405      410      415
142 Pro Asn Pro Tyr Thr Arg Leu Asn Thr Ser Glu Leu Ile Lys Glu Leu
143      420      425      430
144 Phe Thr Asp Cys Gly Pro Leu Glu Ser Ser Ser Leu Cys Asp Tyr Arg
145      435      440      445
146 Asn Asp Met Asn Ala Ser Lys Ile Val Asp Asp Ile Pro Asp Arg Pro
147      450      455      460
148 Ala Gly Ile Gly Val Tyr Ser Ala Ile Trp Gln Leu Cys Leu Ala Leu
149 465      470      475      480
150 Ile Phe Lys Ile Ile Met Thr Val Phe Thr Phe Gly Ile Lys Val Pro

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Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

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151          485          490          495
152 Ser Gly Leu Phe Ile Pro Ser Met Ala Ile Gly Ala Ile Ala Gly Arg
153          500          505          510
154 Ile Val Gly Ile Ala Val Glu Gln Leu Ala Tyr Tyr His His Asp Trp
155          515          520          525
156 Phe Ile Phe Lys Glu Trp Cys Glu Val Gly Ala Asp Cys Ile Thr Pro
157          530          535          540
158 Gly Leu Tyr Ala Met Val Gly Ala Ala Ala Cys Leu Gly Gly Val Thr
159 545          550          555          560
160 Arg Met Thr Val Ser Leu Val Val Ile Val Phe Glu Leu Thr Gly Gly
161          565          570          575
162 Leu Glu Tyr Ile Val Pro Leu Met Ala Ala Val Met Thr Ser Lys Trp
163          580          585          590
164 Val Gly Asp Ala Phe Gly Arg Glu Gly Ile Tyr Glu Ala His Ile Arg
165          595          600          605
166 Leu Asn Gly Tyr Pro Phe Leu Asp Ala Lys Glu Glu Phe Thr His Thr
167          610          615          620
168 Thr Leu Ala Ala Asp Val Met Arg Pro Arg Arg Asn Asp Pro Pro Leu
169 625          630          635          640
170 Ala Val Leu Thr Gln Asp Asn Met Thr Val Asp Asp Ile Glu Asn Met
171          645          650          655
172 Ile Asn Glu Thr Ser Tyr Asn Gly Phe Pro Val Ile Met Ser Lys Glu
173          660          665          670
174 Ser Gln Arg Leu Val Gly Phe Ala Leu Arg Arg Asp Leu Thr Ile Ala
175          675          680          685
176 Ile Glu Ser Ala Arg Lys Lys Gln Glu Gly Ile Val Gly Ser Ser Arg
177          690          695          700
178 Val Cys Phe Ala Gln His Thr Pro Ser Leu Pro Ala Glu Ser Pro Arg
179 705          710          715          720
180 Pro Leu Lys Leu Arg Ser Ile Leu Asp Met Ser Pro Phe Thr Val Thr
181          725          730          735
182 Asp His Thr Pro Met Glu Ile Val Val Asp Ile Phe Arg Lys Leu Gly
183          740          745          750
184 Leu Arg Gln Cys Leu Val Thr His Asn Gly Arg Leu Leu Gly Ile Ile
185          755          760          765
186 Thr Lys Lys Asp Ile Leu Arg His Met Ala Gln Thr Ala Asn Gln Asp
187          770          775          780
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189 785          790
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RAW SEQUENCE LISTING

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:03

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

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206 aagttgtaga tcaggaaaaa caagttaaga gagtgcctac aaataccggg aaaacttgtg 240
207 gatagatttt cattttttat gttaaagacat ataagaacat gaatggtata aaaacaaaat 300
208 cttttataaa tgccatacaa ttatatattt agaaaaatta tatggtggta aaacatataa 360
209 aagaaccaca cactcccaaa tttaacattga gctaatttag tacagtttag ctttgtcaaa 420
210 gctttccttg tttaaaaaaa ctattggctc agtgtgcagg aaggagcata ggagaaaaaa 480
211 ttgccaagaa tatttgaaaa atacagaaaa taaagaaaaa aatcacctac tatcctatca 540
212 aaaattttaa tagctagaat caggataaga tagaatattc ctgtggcagt aattctagtc 600
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215 cctaaataag taaaatttag tactccacaa attgaagaga atttctctct tctctttact 780
216 gccctctgag ttttctcttt ctttctctca cctccaattt tcatgtaaac actttcagtt 840
217 cgagtggacc tttagagattg tctcattcaa tacttttaga aaacaaattt tatagaaccc 900
218 ttgagttctg tgggaattgct tctaataaac aacacctttt gttgttggtg ttgttttagtg 960
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222 taaagagaca atttctgaat ttataacaa tttctagaac agttgagtac ctcactttga 1200
223 gacacatttt tgctaaaagt taaaaacaca aaacccttat gagataaaat aggaagctag 1260
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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/804,472A

DATE: 11/07/2003
TIME: 14:22:04

Input Set : A:\1163 REV SEQLIST.TXT
Output Set: N:\CRF4\11062003\I804472A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:3; N Pos. 13284,13285,13286,13287,13288,13289,13290,13291,13292,13293
Seq#:3; N Pos. 13294,13295,13296,13297,13298,13299,13300,13301,13302,13303
Seq#:3; N Pos. 13304,13305,13306,13307,13308,13309,13310,13311,13312,13313
Seq#:3; N Pos. 13314,13315,13316,13317,13318,13319,13320,13321,13322,13323
Seq#:3; N Pos. 13324,13325,13326,13327,13328,13329,13330,13331,13332,13333
Seq#:3; N Pos. 13334,13335,13336,13337,13338,13339,13340,13341,13342,13343
Seq#:3; N Pos. 13344,13345,13346,13347,13348,13349,13350,13351,13352,13353
Seq#:3; N Pos. 13354,13355,13356,13357,13358,13359,13360,13361,13362,13363
Seq#:3; N Pos. 13364,13365,13366,13367,13368,13369,13370,13371,13372,13373
Seq#:3; N Pos. 13374,13375,13376,13377,13378,13379,13380,13381,13382,13383

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 11/07/2003
PATENT APPLICATION: **US/09/804,472A** TIME: 14:22:04

Input Set : **A:\1163 REV SEQLIST.TXT**
Output Set: **N:\CRF4\11062003\I804472A.raw**

Seq#:3; N Pos. 13384,13385,13386,13387,13388,13389,13390,13391,13392,13393
Seq#:3; N Pos. 13394,13395,13396,13397,13398,13399,13400,13401,13402,13403
Seq#:3; N Pos. 13404,13405,13406,13407,13408,13409,13410,13411,13412,13413
Seq#:3; N Pos. 13414,13415,13416,13417,13418,13419,13420,13421,13422,13423
Seq#:3; N Pos. 13424,13425,13426,13427,13428,13429,13430,13431,13432,13433
Seq#:3; N Pos. 13434,13435,13436,13437,13438,13439,13440,13441,13442,13443
Seq#:3; N Pos. 13444,13445,13446,13447,13448,13449,13450,13451,13452,13453

VERIFICATION SUMMARY

DATE: 11/07/2003

PATENT APPLICATION: US/09/804,472A

TIME: 14:22:04

Input Set : A:\1163 REV SEQLIST.TXT

Output Set: N:\CRF4\11062003\I804472A.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:4860

M:341 Repeated in SeqNo=3